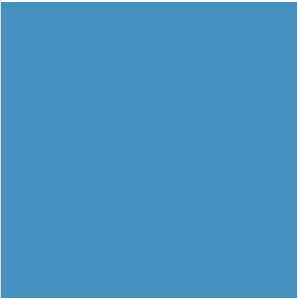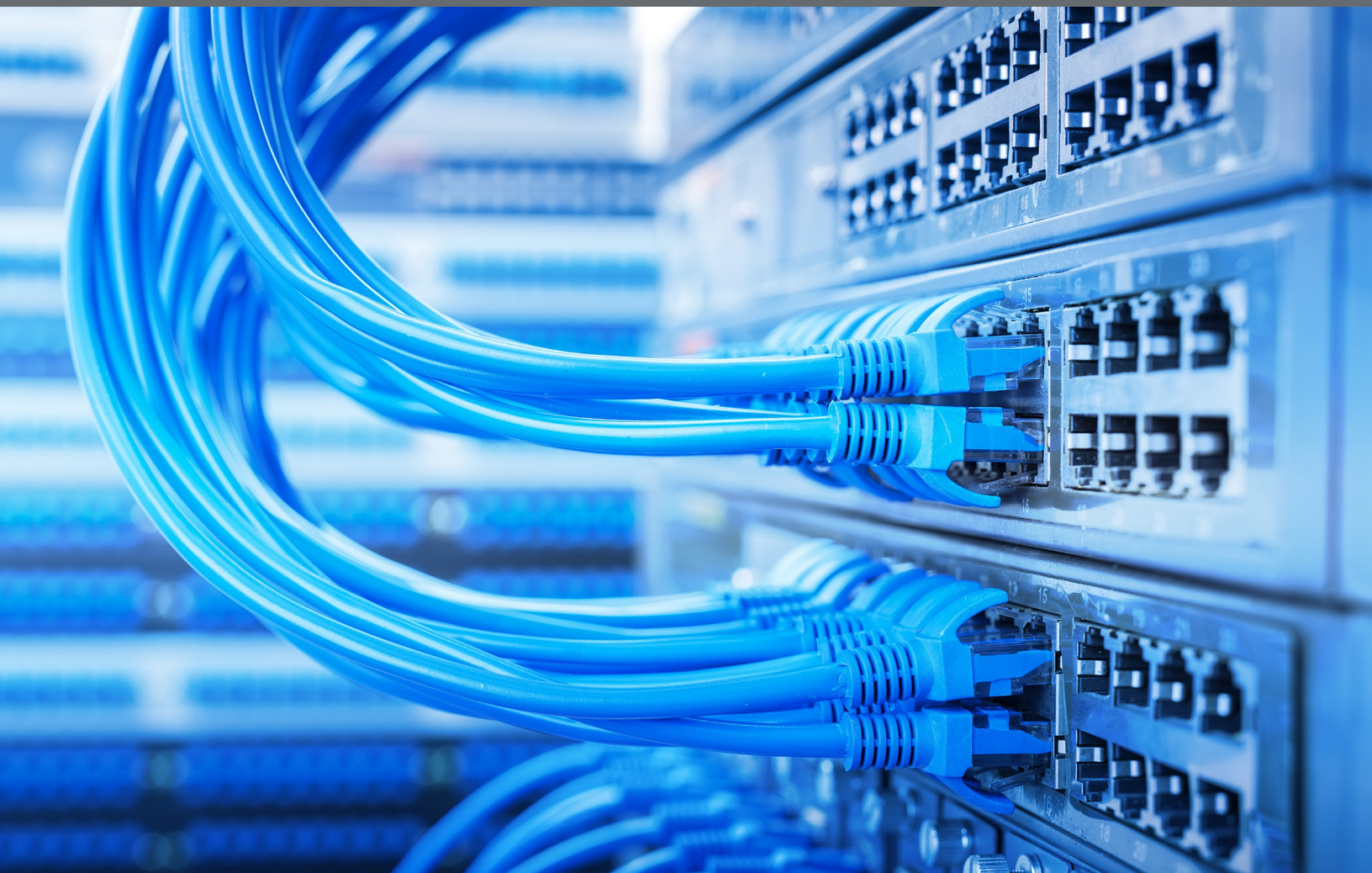J.P.Morgan

LEADING THROUGH INNOVATION:
# THE DATA OPPORTUNITY

As data creation expands exponentially, new applications will continue to transform businesses. Big Data now needs to be taken seriously by companies, banks and treasury organizations.

While the statistics and language surrounding Big Data can seem daunting, the opportunity for companies using it could be huge, especially as the creation of data is expected to increase exponentially over the next decade. The digital universe is doubling in size every two years and will reach 44 trillion gigabytes by 2020, according to the EMC Digital Universe study conducted by IDC. Smartphones, computers, machines and sensors are creating a continuous data stream, allowing companies to understand and interact with their customers like never before.

Volume, velocity and variety, known as the three Vs of Big Data, have changed both the opportunities and challenges that corporates, banks and treasurers face. Large and varied data sets can be processed more quickly and cheaply than ever before to uncover patterns, helping organizations make more informed business decisions and provide more targeted choices to customers.

Big Data has real potential to help organizations better learn from the past, more accurately predict the future and solidify treasury's strategic role within a company.

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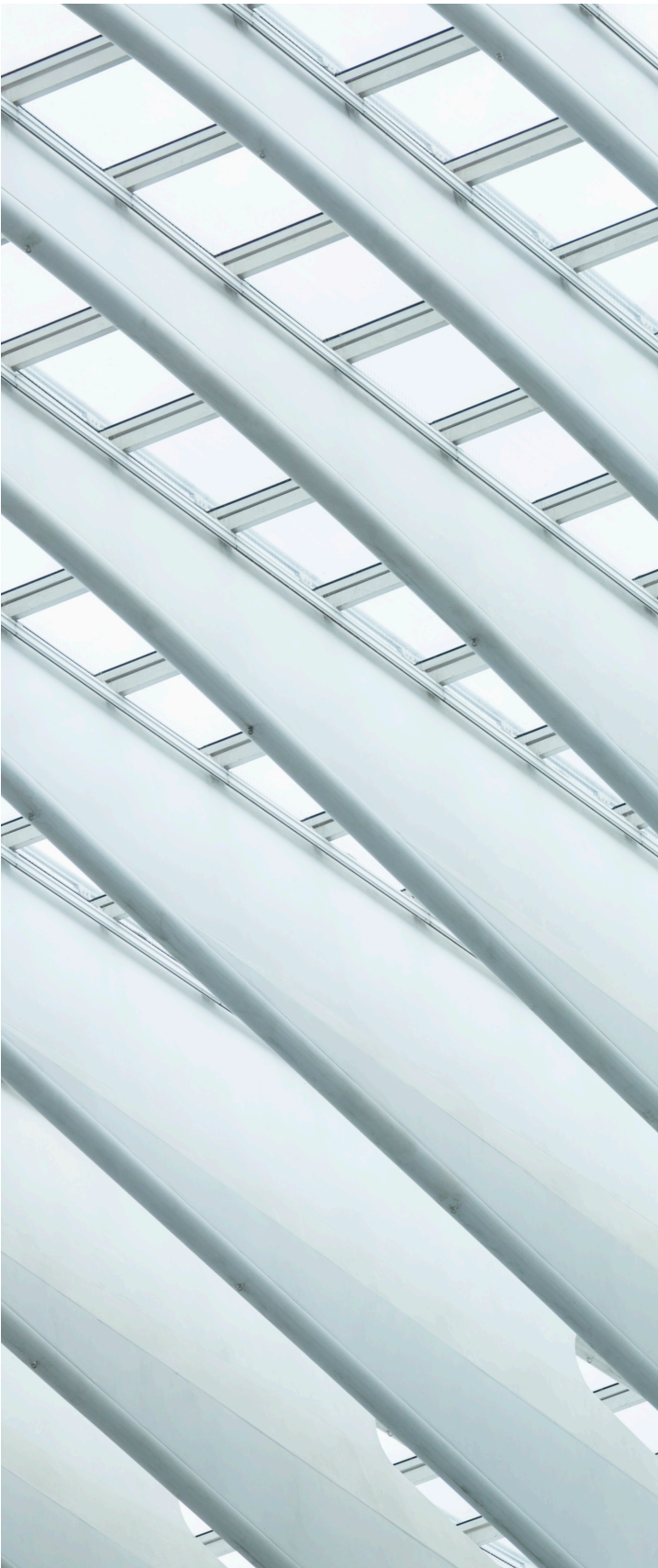
## Better Data and Analytics Tools

So why does data and its appropriate delivery matter? Think of the five largest global companies of today compared to those of 10 or 20 years ago. Technology firms have displaced oil and energy companies on that list, and while it's not data alone that drives these companies, it's absolutely an important part of their business.

To take this further, why does this matter to the average company that's not competing to be one of the world's largest? Regardless of size, ranking or sector, all businesses now have unprecedented access to quality data at cheaper processing costs with better analytics and visualization tools. Simple algorithms can help companies find patterns and identify customer behaviors to solve problems both big and small, potentially leading to cost savings, improved risk oversight and revenue growth.

## Challenges and Costs

Of course, there are obstacles with this explosion of data. Companies have to invest the funds and have leaders who support a data-focused strategy. Even with the cheaper costs of data gathering, analytics and customer delivery, a strategic view and organizational buy-in are crucial.

Another challenge can be managing the scale of data and the business in question. Companies and banks alike often face a scattered landscape of systems and applications—along with the sheer volume of available data—that can appear almost unmanageable. Again, all of this can bring increased costs, from paying for data storage to acquiring the necessary powering and cooling equipment. This is not to mention the skills required from data scientists and engineers, and the possible repercussions of a scandal associated with a breach or misuse of data.

The increased volume of data also presents a greater need for companies to protect the data they hold. The European Union's recent implementation of General Data Protection Regulation (GDPR) brought the issue into the limelight when companies came under fire for not having enough governance or controls over their data. While data protection presents a challenge, companies should consider the danger of inaction: Not adequately capturing or applying data could leave them lagging behind their competitors.

Companies must operate in an evolving and governed environment that supports an integrated infrastructure of applications to capture and analyze data, then deliver meaningful insights and solutions.

# POWERING TECHNOLOGY AND INNOVATION

Across the industry, standardization and intelligent use of data are becoming not only a trend, but an expectation. This is good news for treasury teams in the long run, encouraging further innovation and opportunities for technological disruption across banks and industry bodies. Several current innovations demonstrate how data can be utilized to help improve treasury processes, including:

### ISO 20022

While a payment file format may not initially appear the most exciting topic in an expanding space of fintechs and transformative technologies, the growing adoption of ISO 20022 as a global file standard not only improves compatibility across platforms—thereby reducing costs, manual input and risk—it also enriches the data in a payment message. ISO 20022 has already been adopted across a number of countries, including Europe for SEPA payments and more recently CHF in Switzerland. The UK has proposed plans to eventually adopt the standard to bring the benefits of consistency and standardization across its payment systems.

### SWIFT global payment innovation (GPI)

This global payments standard shows how data and technology are being used together to improve the experience for customers and the services that banks can offer. Remittance information is transferred unaltered through the payment chain and the introduction of a Unique End-to-End Tracking Reference (UETR) allows payments to be easily traced and tracked. This should reduce the burden on treasury teams, improve the payment flow and reduce delays in funding that occur through correspondent banking networks.

### Application Programming Interface (API)

Through the dynamic exchange of real-time data enabled by APIs, treasurers can manage their global cash positions across multiple banks, currencies and countries in one centralized place. Companies with high volumes of transactions and ever-changing payer/payee lists can create channels to interact with bank service queries through the use of structured data and connectivity to the banks' secured networks, which allows for more efficient cash management. The options for future developments and business applications in this space can only continue to grow and benefit both business and treasury.

Data standardization opens the door for further automation, enabling banks, treasurers and clearing organizations to delve into trends more easily. New technologies available in bank portals and tailored analytic programs make it easier for those who aren't tech savvy to use dashboards and analytic tools to find notable trends in their cash management activities. This can call out simple unknowns—such as dormant accounts, avoidable FX transactions, or vendor- or customer-specific transaction trends—which can be fed back to the business or used to improve overall cash management. Enriched and standardized data also allows banks and corporates to improve the reconciliation approach through pattern-based logic.

## Invaluable Tool for Treasury

The topic of data is becoming increasingly relevant to banks, treasury organizations and the relationship between the two.

At its most basic, treasurers have always needed data to manage their cash—to make payments, monitor receivables, create forecasts and mitigate risk. At its best, data allows treasurers to do this in real time (agnostic of bank, country and currency) through their chosen system or interface, with the ongoing opportunity to provide more comprehensive analysis that leads to more accurate and meaningful predictions.

This access to information, in turn, helps to elevate the role of the treasury team within an organization and provide valuable insights to support and influence business decisions. Big Data can help improve operational efficiencies, identify issues with internal systems, and detect and protect against fraud. These are all topics that matter to treasury professionals as much as they do to big banks.

How does this actually change the day-to-day? Data and data analytics have already started to transform the options available to treasurers, enhance the expectations on their banks and push both to look for solutions for the future. This creates an opportunity to adopt technological innovations such as machine learning and artificial intelligence to improve these organizations. Banks are now more focused than ever on how to use the huge amount of data they possess to enhance their clients' experience.

Expanding on this, there also needs to be a view from banks and companies on how they can optimize internal data by pairing it with external data. This could be through banks and corporates partnering or bringing in third parties who have their own unique but enhancing data sets.

Ultimately, data provides the opportunity for banks and treasurers to improve what they're doing. Some of this already happens today and goes almost unnoticed, such as payments auto-repairing from the analysis of historic transaction patterns. However, there are other areas where corporate banks could learn from the innovations practiced by their retail counterparts, such as machine learning for virtual assistants or chatbots that can give instant replies to simple or predictable queries.

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## Asserting Treasury's Strategic Potential

Gathering more data on historic actuals and using the tools more readily available across the market can help treasurers forecast their cash position more accurately. Such tools can use external data and replicate scenarios based on chosen variables. This allows treasury to give the business more accurate estimates of the impacts of seasonality and market factors, as well as influence business decisions like customer payment terms. Not only will the business benefit, but treasury also demonstrates its significant role in the company's broader decision-making process.

The pressure needs to be kept on to push banks, corporates and treasurers to work together to fully capture structured and unstructured, internal and external data (where allowed by regulations) and then deliver it in a user-friendly format. Using innovative technologies like data analytic tools or machine learning, this information can support businesses and treasury teams alike.

The opportunity for companies, banks and, more specifically, for internal treasury teams is to provide meaningful and understandable information at reduced costs that leads to faster, more agile and accurate decision-making.

**Kimberley McNeil**
**Vice President, International Coverage Executive**
**J.P. Morgan**

Kimberley is a Vice President in the International Commercial Bank team at J.P. Morgan, based in London and working with the firm's European subsidiary clients of US headquartered companies.

In her current role as an International Coverage Executive, her responsibilities include forming new relationships and covering existing clients within the Corporate Client Banking Technology sector, providing solutions for her clients across J.P. Morgan's product suite including treasury services, trade and foreign exchange.

Kimberley has been in Commercial Banking for the past five years and with J.P. Morgan since 2009 when she joined on the London Graduate Programme. During her time at the firm she has held various roles in different lines of business including support roles in Credit Hybrids and Global Emerging Markets. Most recently, before moving into Commercial Banking, she was working in Finance and Business Management for J.P. Morgan's Treasury Services organisation.

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